

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

14. (Canceled) A hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, in which the specific position is at least one position selected from the group consisting of the position between 294-295, between 302-310, between 362-363, the N-terminal and the C-terminal of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6.

15. (Canceled) The hybrid enzyme according to claim 14, in which the specific position is a position at which the glucose-6-phosphate dehydrogenase activity can be maintained even by the insertion or substitution of a peptide having 6 or more amino acid residues.

16. (Canceled) The hybrid enzyme according to claim 14, in which the specific position is a position at which the glucose-6-phosphate dehydrogenase activity is modulated when a material having binding ability to the peptide introduced by insertion or substitution is bound to said peptide.

19. (Canceled) The hybrid enzyme according to claim 14, in which the peptide comprises an amino acid sequence having at least 6 or more sequential amino acid residues and has a character that there is a material having binding ability specifically to the part of the hybrid enzyme in which the peptide is substituted or inserted.

47. (Canceled) The hybrid enzyme according to claim 19, in which the peptide comprises an amino acid residue selected from an amino acid sequence of

CRP, IgG, IgA, IgM, C3, C4, β 2 microglobulin, albumin, α -fetoprotein, CA19-9, prostatic specific antigen, carcinoembryonic antigen, insulin, human chorionic gonadotropin, prolactin, parathyroid hormone, thyroid stimulating hormone, streptolysin O, hepatitis B virus, hepatitis C virus, human immunodeficiency virus or human papilloma virus.

48. (Currently Amended) ~~A~~The hybrid enzyme having a ~~according to claim 19, in which the peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, wherein the peptide compriseses at least 6 or more sequential amino acid residues selected from the amino acid sequence of SEQ ID NO: 1 and has a character that there is a material having binding ability specifically to the part of the hybrid enzyme in which the peptide is substituted or inserted, and is introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, in which the specific position is at least one position selected from the group consisting of the position between 294-295, between 302-310, between 362-363, the N-terminal and the C-terminal of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6.~~

49. (Currently Amended) ~~A~~The hybrid enzyme having a ~~according to claim 19, in which the peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution , wherein the peptide comprises at least 6 or more sequential amino acids and is selected from the peptides having the amino acid sequences of SEQ ID NO: 2 though SEQ ID NO: 5 and has a character that there is a material having binding ability specifically to the part of the hybrid enzyme in which the peptide is substituted or inserted, and is introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, in which the specific position is at least one position selected from the group consisting of the position between 294-295, between 302-310, between 362-363, the N-terminal and the C-terminal of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6.~~

50. (Currently Amended) ~~A~~The hybrid enzyme ~~having a~~ according to claim 19, in which the peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, wherein the peptide comprises at least 6 or more sequential amino acids having ~~has~~ the amino acid sequence of SEQ ID NO: 46 and has a character that there is a material having binding ability specifically to the part of the hybrid enzyme in which the peptide is substituted or inserted, and is introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, in which the specific position is at least one position selected from the group consisting of the position between 294-295, between 302-310, between 362-363, the N-terminal and the C-terminal of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6.

51. (Currently Amended) ~~A~~The hybrid enzyme ~~having a~~ according to claim 19, in which the peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution wherein the peptide comprises at least 6 sequential amino acids having ~~has~~ the amino acid sequence of SEQ ID NO: 50 and has a character that there is a material having binding ability specifically to the part of the hybrid enzyme in which the peptide is substituted or inserted, introduced into a specific position of a glucose-6-phosphate dehydrogenase by insertion or substitution, in which the specific position is at least one position selected from the group consisting of the position between 294-295, between 302-310, between 362-363, the N-terminal and the C-terminal of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6.